

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024621**Date Inspected:** 23-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

**WELDING**

OBG Bay 14

This QA Inspector randomly observed the following work in progress:

**Flux Cored Arc Welding (FCAW)**

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3020BB-028 located on SA to Bottom Plate of the OBG Segment 14W. The welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-345FCAW-2G (2F)-ESAB-Repair and B-CWR2752.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3020AJ-389 located on Floor Beam to Bottom Plate of the OBG Segment 14W. The welder is identified as 067949. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

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This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3014B-016 located on Deck Panel Diaphragm to Floor Beam Flange of the OBG Segment 13BW. The welder is identified as 067275. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3014D-228 located on Deck Panel Diaphragm to Floor Beam Flange of the OBG Segment 13BW. The welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3020M-188 located on Edge Beam to Floor Beam at PP126 of the OBG Segment 14W. The welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB. See Photo A below

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3014F-005 located on Deck Panel Diaphragm to Floor Beam Flange of the OBG Segment 13BW. The welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

### Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3148-243 located on Deck Panel Diaphragm to Deck Panel Diaphragm of the OBG Segment 13CW. The welder is identified as 045204. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3148-249 located on Deck Panel Diaphragm to Deck Panel Diaphragm of the OBG Segment 13CW. The welder is identified as 037932. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3146-244 located on Deck Panel Diaphragm to Deck Panel Diaphragm of the OBG Segment 13CW. The welder is identified as 066674. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3020BB-010 located on SA to Bottom Plate of the OBG Segment 14W. The welder is identified as 067942. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair and B-WR20164.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as Seg3020M-004 located on Floor Beam to Longitudinal Diaphragm of the OBG Segment 14W. The welder is

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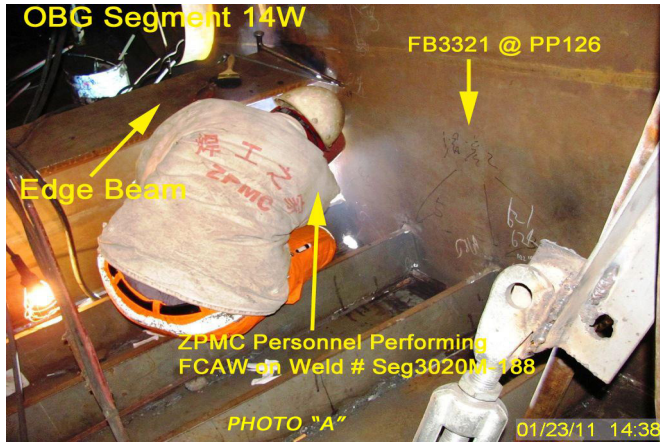
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identified as 066398. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair and B-CWR19827.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Singh, Vikram	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson, Rodney	QA Reviewer

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